

# **1998 Ernst & Young Actuarial Report**

## **EXECUTIVE SUMMARY**

### **A. OBJECTIVES**

The Office of Statewide Health Planning and Development (OSHPD), through the Cal-Mortgage Loan Insurance Division (Cal-Mortgage), administers the California Health Facility Construction Loan Insurance Program (Program), and the Health Facility Construction Loan Insurance Fund (HFCLIF). Under the Program, health facilities borrow money for capital needs from long-term lenders, and the loans are guaranteed by the State of California (State). The Cal-Mortgage Program guarantees that those loans will be paid off from resources available in the HFCLIF. Should the HFCLIF be insufficient, the State would be required to issue its own debentures and make payments on the debentures from the State's General Fund.

There are two main objectives of this study, which Ernst & Young (E&Y) has been retained to report. The first objective is to determine the reserve sufficiency of the funds in the HFCLIF as of June 30, 1998. The second objective is to assess the risk to the State's General Fund from the Cal-Mortgage Program.

As part of this study, E&Y reviewed the prior actuarial study that was performed for Cal-Mortgage by Mercer as of June 30, 1996 and dated August 1997 (1997 Mercer Study); E&Y also reviewed the California Division of Insurance (DOI) standards on reserves for financial guaranty insurance companies.

### **B. APPROACH**

E&Y's approach to determine the reserve sufficiency and the risk to the State's General Fund included a study by our consultants on the current environment of health care facilities and future trends, both nationally and in California. E&Y also reviewed the financial condition of Cal-Mortgage's portfolio of insured loans through the examination of the debt service ratios on Cal-Mortgage's insured facilities for 1996 and 1997.

In our calculations to determine the reserve sufficiency, E&Y incorporated the current trends of health care facilities and the current state of Cal-Mortgages book of business. From our findings, E&Y created a computer model which simulates the ability of the HFCLIF to provide cash outlays that would come from the expected defaults of projects insured by Cal-Mortgage. Through use of the model, E&Y calculated the expected value of the fund balance for each of the next thirty years. To test the risk to the State's General Fund, E&Y varied the parameters underlying the cash flow model and took into consideration the possibility of extraordinary events (e.g., a large unexpected default).

Notwithstanding the fact that the Cal-Mortgage Program is not required to meet these standards, for comparison purposes E&Y calculated the required reserve for the

HFCLIF based on California DOI standards on reserves for financial guaranty insurance companies.

Please note that while Cal-Mortgage requires each insured project to establish a bond reserve (i.e., a debt service reserve account or fund (DSRF)), this reserve provides protection only for that individual project; such funds are not available to the other insured projects. In other words, once a project exhausts its DSRF, only the HFCLIF (not the DSRF of another health project) could be used to cover the default. As such, the HFCLIF required reserve should be determined independently of the DSRFs, as these accounts are specific to a project and are not available for other problem loans.

## **C. Conclusions**

Based on our analyses, E&Y concludes the following:

### **1. Outlook on the Health Care Industry**

Healthcare facilities in 1998 face many changes in the foreseeable future. The majority of changes, however, are expected to be calculable and predictable. This is primarily a result of the Federal Balanced Budget act of 1997 which provides strict payment and reimbursement guidelines.

Other driving forces to affect the future of the health care industry from 1998 onward include: continued mergers and acquisitions with expected consolidation; new government and regulatory mandates, especially in California; Government investigations of fraud; and increased use of integration technology to tackle year 2000 data issues and to increase efficiency. Consequences of these driving forces are expected to result in a more efficient industry which will be required to pay close attention to developing internal compliance.

Due to changing demographics, the health care industry is expected to make accommodations to meet requirements of various issues, such as the aging baby boomer population. Providers are expected to continue evolving as a result of managed care forces. Also, as employers more actively participate in healthcare, the quality of care delivered by healthcare facilities will be carefully measured and reported. Another major force driving change in the industry will be the continuing shift of services away from acute inpatient facilities toward an outpatient setting.

### **2. Financial Condition of Cal-Mortgage's Portfolio of Insured Loans**

The review of the 1996 and 1997 financial statements of Cal-Mortgage's portfolio indicates that the overall financial health of the borrowers has been deteriorating as compared to 1994 and 1995. This deterioration is

mainly due to hospitals, which have suffered a substantial decline in their ability to pay their debt service.

### 3. Reserve Sufficiency of the HFCLIF and Risk to the State's General Fund

Based on the cash flow analysis, under "normal and expected" conditions the HFCLIF should maintain a positive balance for at least the next 18 years whether or not it insures new loans. The parameters underlying the "normal and expected" conditions are defined as follows:

- The rate at which loans default is based on the health care industry default rate of 0.87 percent of the outstanding loan balance determined as described on pages 74 through 77.
- The default pattern is based on the health care industry payout pattern.
- The 1999 administrative expenses are \$4.2 million and increase annually at a rate of 3.0 percent.
- The percentage of loans that terminate earlier than anticipated (i.e., termination) varies by calendar year and ranges from 0.5 percent to 12.6 percent of the outstanding loan balance.
- Annual written premium is at the maximum allowable charge and is equivalent to 0.005 multiplied by the outstanding loan balance.
- Investment income is earned at an annual rate of 5.699 percent.
- The anticipated recoveries from Triad will be one of the following scenarios:
  - 1) No recovery is made;
  - 2) \$30 million is recovered on July 1, 1999;
  - 3) \$30 million is recovered on July 1, 1999, and
  - 4) \$20 million is recovered on July 1, 2001.

The "normal and expected" conditions do not take into consideration the possible occurrence of extraordinary events. In order to incorporate the possibility of extraordinary events and to determine sensitivity of the HFCLIF to the "normal and expected" conditions, E&Y applied a stochastic simulation model. Under the model, E&Y varied the parameters underlying the "normal and expected" conditions and incorporated the possibility of extraordinary events.

E&Y ran sixteen separate simulations, in which E&Y varied the parameters underlying the model, the probabilities of extraordinary events, and whether or not new loans will be insured. Extraordinary events are defined as a catastrophe that would cause a major devastation to the insured properties themselves (e.g. earthquakes, fire, riot, act of terrorism, act of war), an economic or legislative change that adversely impacts the financial viability of some segment of the health care industry, or a large unexpected default.

Under all scenarios, the HFCLIF balance remains positive in the medium term (ten years); however, the balance may become negative in the long term (twelve to fifteen

years) depending on the likelihood of extraordinary events and on whether or not Cal-Mortgage continues to insure new loans.

Based on the California DOI standards for financial guaranty insurance companies, the required HFCLIF balance would be \$216.6 million. The actual HFCLIF cash reserve as of June 30, 1998 was \$130.4 million. Therefore, under the California DOI standards there was approximately an \$86.2 million shortfall (\$216.6 million minus \$130.4 million) in the fund as of June 30, 1998. The 1997 Mercer Study concluded that as of June 30, 1996, there was a \$97.0 million shortfall. The shortfall has therefore decreased since the last study. E&Y notes that, if Cal-Mortgage were an insurance company, it also would be subject to the rating standard of the various bond insurance rating agencies, and these reserve requirements are more stringent than those of the California DOI.

The difference between the California DOI standard for required reserves and the cash flow analysis on which this study is based, is that the California DOI requires the reserves to be fully funded up front (i.e., requires the accounting to be on a cash basis) and would not consider the future operations of the Cal-Mortgage Program, such as new business, future termination, and future losses. The cash flow analysis is on a "pay as you go" accounting basis, and measures whether the HFCLIF will have enough money to pay for its cash outlays over the next thirty years, taking into consideration the future operations of the Program. The Cal-Mortgage Program was set up as a state Program with the full backing of the State. As such, the legislature did not capitalize the Cal-Mortgage Program, as it was already backed by the State's General Fund, and we note that the legislature never funded (or funded and took it away) the HFCLIF.

**Therefore:**

- Were Cal-Mortgage subject to the California DOI standards, i.e., on a fully funded or accrual basis, the HFCLIF would be deficient. Notwithstanding the lack of capitalization, the HFCLIF has grown to \$130.4 million as of June 30, 1998, as compared to the DOI standard of \$216.6 million.
- On a cash flow or "pay as you go" basis the HFCLIF will maintain a positive balance for the medium term; however, our analysis indicates that at some point in the future the fund balance could become negative. The point in the future at which the fund becomes negative (and hence the State's General Fund is at risk) depends on the frequency and severity of extraordinary events. However, even under our "worst case" type scenario (e.g., assuming a 10 percent yearly probability of an extraordinary event), E&Y would still expect the fund to remain positive until 2008, which would allow the management of Cal-Mortgage time to plan and implement a recovery strategy. The "worst case" scenario in the 1997 Mercer Study projected a positive fund balance until 2005.

There is a certain amount of uncertainty surrounding the above estimate. These conclusions are based on the estimation of future contingent events, such as future default rates and future payments on already defaulted loans. The results are highly

dependent on these assumptions, and, should an assumption not occur, it could result in major differences in the results. As such, there is no guarantee that the estimates will not prove to be inadequate or excessive.

The "Analysis" section of this study provides more detail on these conclusions.

#### **D. Distribution and Use**

Health and Safety Code Section 129330 requires Cal-Mortgage to obtain an actuarial study every other year. This actuarial study was prepared at the request of Cal-Mortgage. This study may be distributed only in its entirety.

#### **E. Reliance and Limitations**

For this study, E&Y relied on the following information:

- A report titled "Office of Statewide Health Planning and Development; The Cal-Mortgage Program; California's Health Facility Construction Loan Insurance Program; Actuarial Study; As of June 30, 1996," prepared by Mercer and dated August 1997 (1997 Mercer Study).
- Financial statements for Cal-Mortgage projects prepared by various certified public accounting firms and provided by Cal-Mortgage.
- The Annual Statement for the year 1997 of the AMBAC Indemnity Corporation.
- The Annual Statement for the year 1997 of the Municipal Bond Investors Assurance Corporation.
- California State Insurance Code Sections 12095 through 12118.
- A report listing issue date, default date, default bond amount for nursing homes, hospitals, retirement and congregate living projects, medical facilities including drug and rehabilitation, clinics, etc., prepared by Bond Investors Association.
- The Cal-Mortgage State Plan prepared by Cal-Mortgage and dated December 1995.
- A report titled "All Nursing Home and Lifecare/Retirement Municipal Debt as of 8/15/98," listing issue year and principal amount issued, provided by Securities Data Company.
- A report titled "All Healthcare Municipal Debt as of 8/15/98," listing issue year and principal amount issued, provided by Securities Data Company.

- A report titled "Monthly Status Report to the Director from the Cal-Mortgage Loan Insurance Division; Office of Statewide Health Planning and Development," dated July 2, 1998.
- A report titled "Cal-Mortgage Loan Insurance Division; Monthly Activity Report; June 30, 1998," including Cal-Mortgage insured projects by health facility as of June 30, 1998, prepared by Cal-Mortgage.
- A report including the investment yields on Cal-Mortgage's portfolio for the last five years, prepared by Cal-Mortgage.
- A report titled "Cal-Mortgage Collateral Valuation Study; as of October 15, 1993; Volume I," prepared by John Connolly IV & Company Healthcare Group.

In addition, E&Y had telephone conversations and meetings with the following employees from Cal-Mortgage: Mr. Dennis Fenwick, J.D., Deputy Director; Mr. Dale Flournoy and Ms. Tacia Carroll, Construction Financing Supervisors; Mr. Ted Carthen, Associate Governmental Program Analyst; Ms. Anna Gragg, Construction Financing Representative; Mr. Ed Gibson, Construction Financing Representative; and Mr. James Morgan, Staff Service Analyst.

For our study E&Y relied on the accuracy and completeness of this information without independent audit. If this information is inaccurate or incomplete, our findings and conclusions may need to be revised.

This study's conclusions are based on an analysis of the available data and on the estimation of many contingent events. Future costs were developed from historical claim experiences and covered exposure, with adjustments for anticipated changes. In addition to the assumptions stated in this study, numerous other assumptions underlie the calculations and results presented herein.

This study's conclusions are projections of the financial consequences of future contingent events and are subject to uncertainty. There may have been abnormal statistical fluctuations in the past, and there may be such fluctuations in the future. Because of the uncertainties inherent in the estimation of future costs, estimates set forth in this study may prove to be inadequate or excessive. Actual costs may vary significantly from the estimates.

The conclusions of this study are based on specific scenarios and simulations which E&Y believes represent a reasonable range of possible change in conditions. However, there are numerous scenarios and simulations not specifically reviewed which conclusions may be substantially different from those described in this study. In addition, conditions may change significantly between the present and 2028, which may alter our analysis and the resulting conclusions.

Numbers in the exhibits may be shown with more significant digits than their accuracy suggests. This has been done to simplify the review of the calculations. In addition, there may be differences in the actual values shown due to rounding.